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*In this issue —*  
AN IMPORTANT ARTICLE  
ON THE SOUTH'S NEW  
WINTER COVER CROP —  
*BLUE LUPINE*

# ≡ SOIL CONSERVATION ≡

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# SOIL CONSERVATION

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*Front Cover: Miss Laverne Bowen in blue lupine on F. B. Calhoun Farm, Pinehurst, Ga.*

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# *Land Values in Relation to Soil Conservation*

By E. C. Weitzell

IT IS GENERALLY recognized that the "land boom" following World War I played an important role in the neglect and exploitation of soil resources during subsequent years. Lower prices for farm products found farmers with excessive debt burdens, which had to be paid from only a fraction of the income necessary to justify 1919 values. The resulting financial distress and widespread mortgage foreclosures are well known. In the effort to retain farms and homes, farmers who saddled themselves with inflated mortgages had no alternative to the exploitation of soil resources. The long-time neglect of resource conservation as a result of the "deplete and move on" philosophy was extended and enforced by the preference of immediate consumption. It is scarcely necessary to remind anyone of the condition of soil resources by 1933.

Nonfarmers who purchased farm lands were no more fortunate. Lower incomes encouraged them to "squeeze" tenants and croppers, and to provide a bare minimum of operating capital. As a result, soil resources generally were neglected.

This situation added to the wide neglect of soil resources, and gave rise to the need for subsidies and technical guidance. Too often people forget that society has a stake in any situation which affects the future sources of food, fiber, and raw materials. The individual farmer and his family do not stand alone in this respect. Thus, it is important for everyone to realize the need during the next few years to guard against a recurrence of land inflation with its consequent neglect of soil conservation.

Land values are again on the way toward the 1919-20 peak (see table 1), as seen in the 83-percent increase over the 1935-39 average. Whether values generally will reach the World War I peak is still undetermined. But it is worth noting that current farm real-estate values in the East South Central and Pacific States are already considerably above the 1920 high. It is true that considerable caution is being exhibited in the North Central States, but even in these areas a gradual advance in land transfer prices is in process. The Southeastern States include some of our most severe conservation problems, yet this region is now experiencing the greatest increase in land values.

Most authorities are warning against the continuation of soil erosion and depletion that has occurred during the last 5 war years. Even though incomes have been high, the scarcity of labor, machinery, and fertilizers has deterred the maintenance of desirable levels of fertility and has slowed the progress of establishing soil conservation measures. The question is: Will this continue? If resources are not protected, and "repaired," during this period of high incomes, the pressures against conservation may be a distinct handicap at lower income levels than currently prevail. High land capitalization will greatly intensify this problem.

IT SHOULD BE RECOGNIZED that recent high incomes may not be net, but may consist partially of liquidated capital assets. To the extent that this is true, a part of current incomes should be earmarked as a reserve fund for establishing conservation systems of land management and for replacing depleted resources just as soon as technical help, essential fertilizers, and other soil amendments are available. The repair of buildings and the replacement of machinery are essential complementary resources that should be kept in good

condition. Farmers sometimes neglect the maintenance of presently owned resources in favor of more land just as soon as they have a little capital available. In many instances they might be better off by maintaining a smaller acreage at a reasonably high level of productivity and repair, rather than by burdening themselves with mortgage debt and a much larger job of conservation. This is true particularly when the outlook is for substantially lower prices than those which give rise to the inflated "values" now paid for land.

According to available information, net farm incomes (parity ratio) were higher than ever be-

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fore. The November parity ratio of 124 is 40 points above the 1935-39 average. This is a strong stimulus to higher farm values, and it could be the basis for an extremely disastrous farm land boom, unless everyone puts on the brakes. When looking at the November farm price index of 263, table 1, we need only to glance at the 1932 index of 68 to imagine what this all means. The November 1 land value index of 152, in all probability, already includes a considerable amount of overcapitalization in terms of long-run conservation values.

TABLE 1.—Trend in land values, farm prices, and farm costs, United States

[1910-14=100]				
Item	1910-14 base	Index, 1919-20 peak	1932-33 bottom	1946 July
Land values <sup>1</sup> .....	100	170	73	152
Prices received <sup>2</sup> .....	100	211	68	263
Costs paid <sup>3</sup> .....	100	202	120	212

<sup>1</sup> For land values, 1912-14=100 see *The Farm Real Estate Situation, 1944-45*, U. S. Dept. of Agriculture, Cir. 743, 1945, and *Current Developments in the Farm Real Estate Market*, U. S. Department of Agriculture, December 1946.  
<sup>2</sup> *Agricultural Statistics*, U. S. Department of Agriculture, 1942, pp. 647-8.  
<sup>3</sup> *Agricultural Prices*, U. S. Department of Agriculture, November 1946. (The "costs paid" index is for commodities purchased by farmers.)

More than half of all land transfers in recent months have been entirely for cash. To the extent that this is true the burden of debt will not be a conservation problem. However, landlords are prone to crowd production for a certain level of earnings when incomes are low. They are reluctant to return needed capital for maintaining soil resources. Since 36 percent of all buyers of farm land during the last year were reported to be nonfarmers, this is an important consideration.

The activity of the farm real estate market is indicated by the fact that approximately 55 farms per 1,000 changed hands during the year ending March 1, 1946, contrasted to 34 per 1,000 in 1941. During this 5-year period, the total amount of farm mortgage debt was reduced from \$6,534 million to \$5,080 million, or about 22 percent. This is encouraging. But accompanying this, is an increase in the amount of new mortgages held by private lenders in the amount of \$95 million. This probably means a reduction in the length of repayment periods, inasmuch as private lenders usually provide shorter terms than do federally sponsored credit agencies. Together with higher values, short-term mortgages may mean greater pressure on land resources because of the higher annual payments, depending on the amount of the purchase price encumbered by mortgage.

All of these conditions add up to an over-all picture which may not be conducive to soil conservation. Expansion in these negative factors during the next year would produce a serious situation in this respect. This prospect causes one to inquire as to whether it would not be desirable for farmers to intensify their efforts to build and protect resource productivity now, when farm incomes are relatively high. This depends on the real purchasing power of current incomes in terms of present and future costs. It may be observed that the purchasing power of farm prices (received) in relation to prices paid for essential items of conservation is more favorable now than it has been since 1920. To the extent that farmers do not need to employ additional labor and machinery in order to install conservation practices, this current advantage is considerably greater.

How long farm prices will remain at present levels it is not possible to forecast. All that safely may be said is that they will go down, and the time may not be far off. In any event, it is not possible to foresee long-sustained farm incomes high enough to justify current land values. Unless land can be obtained at a price consistent with long-run probable earnings, it is almost sure to be a burdensome investment.

If we take a look at the history of farm prices up to November 1946, table 2, the unusually high current prices stand out. In terms of the long-run situation, however, the "possible 1950" prices are more significant. This projection of possible 1950 prices is based on the assumption of full employment, and as such is exceedingly liberal. The disparity between current and possible future prices, in general, is illustrated by the 103-point difference in the all-commodity farm price index. From the standpoint of long-run land values and the possibilities for a reasonable level of soil conservation, it is likely that the estimated 1950 prices are the maximum that can be hoped for.

The farm production picture forming the setting for the present land value situation is the result of wartime demands. Gross agricultural production was advanced 24 percent in 1944, from the 1935-39 base years (see U. S. D. A. Miscellaneous Publication No. 595, p. 5). In general, this expansion in output was not achieved by farming more land, but by increasing the yields of land already being farmed. Higher yielding varieties of grain, soil and water conservation, mechanization, and other technological developments have



led to unprecedented production of both crops and livestock.

Wartime needs created the temporary demands, and since the termination of hostilities the provision of relief and rehabilitation has absorbed vast quantities of farm products. In addition, the greatest purchasing power that our people have ever known is currently adding to the demand for food, fiber, and oil crops. And there is no indication that the limitations of physical production have been reached.

At the same time, the best estimates that can be made give no hope for a continuation of the present demand for farm products. The only hope for retaining a substantial amount of the current demand rests in the possibility for the creation of a virile and favorable world trade. The obstacles to favorable foreign trade are many. Among them are the lack of purchasing power at the disposal of those countries which might be consumers of our domestic surpluses, and the fact that a large number of the products that might be imported would be in direct competition with domestic production. These are only a few of the considerations that must be reckoned with when looking toward the future of land values. The same factors form the basis for the possibilities expressed at the "1950 bench-mark" prices given in table 2.

A reduction in demand and farm prices is not followed directly by reduced production. Farmers continue to produce, even though they may neglect conservation to do so. Unless they can cut overhead expenses, they have no acceptable alternative, as long as they can make any return to fixed costs, above their current or variable costs. This illustrates the close relationship between farm

prices, including land values, and the possibility for adequate resource conservation. At least to the extent that conservation is dependent on the purchase of maintenance items, farm income is an extremely important factor. Any burden on income reduces the feasibility of providing the essential elements of productivity maintenance.

Many people do not stop to consider fully the implications of inflated land values in terms of future earning and paying ability. For example, let us assume that a farmer buys a farm at a price of \$22,000, on the basis of current farm prices. He makes a down payment of \$2,000 and gives a mortgage for the remaining \$20,000, which is contracted to be paid in 20 equal annual installments, at 4 percent interest. Thus, the total cost of the mortgage (capital and interest) is \$29,432, or a little more than \$1,471 per annual payment. It may be supposed, further, that this is the maximum annual payment that could be made in view of other obligations, including soil conservation.

It has already been noted that the most favorable expectations lead to the conclusion that farm prices may fall at least 35 percent. Considering the fact that farm costs never fall to the extent that prices received do, this price reduction would normally mean a much greater reduction in net income. But for purposes of illustration it may be assured that costs are reduced proportionately, and that net income is decreased 35 percent.

Then, instead of a value of \$22,000, the reduced net income capitalized at 4 percent is \$14,300. Moreover, the farmer's ability to pay has been reduced 35 percent; and the new level of income will justify annual amortization payments of only \$1,006, instead of the annual payments of \$1,471 that were previously contracted.

What does the farmer do now? There are several alternatives: He may reduce his level of living, cancel life-insurance policies, default on non-farm financial obligations, exploit the land in an effort to keep his home, or he may default on the mortgage payments and lose his farm and home. The usual tendency, under circumstances of this character, is to neglect the conservation of land resources, first of all, in an effort to hold on. However, this often proves to be the wrong approach, because as resources are depleted, the ability to pay continually decreases. Before long the resources from which a part of the debt might have been

(Continued on page 162)

TABLE 2.—Trend in farm commodity prices in the United States

Selected commodities	Prices received by farmers <sup>1</sup>				
	1914	1919	1932	November 1946	Possible 1950 <sup>2</sup>
Cotton (lb.).....	\$0.07	\$0.35	\$0.06	\$0.29	\$0.13
Tobacco (lb.).....	0.10	0.31	0.10	0.44	0.34
Wheat (bu.).....	0.97	2.16	0.38	1.89	1.10
Corn (bu.).....	0.71	1.51	0.32	1.27	0.90
Beef (cwt.).....			4.25	17.60	10.25
Pork (cwt.).....			3.34	22.80	11.25
Milk (cwt.).....			1.27	5.00	3.10
All commodities <sup>3</sup> .....	101	213	65	263	160

<sup>1</sup> *Agricultural Statistics*, U. S. Department of Agriculture, 1942; and *Agricultural Prices*, U. S. Department of Agriculture, November 1946.

<sup>2</sup> Estimated as postwar "benchmark" in terms of full employment. See *Peacetime Adjustments in Farming*, U. S. Department of Agriculture, Misc. Pub. 595, 1945.

<sup>3</sup> Index, 1910-14=100.

**C**ASON J. GALLAWAY feels very keenly that the great majority of Georgia's farms can be made better places to live on.

Callaway developed this conviction some years ago. But at the time various people were keeping him too busy in the cotton industry to do anything toward proving it. At 24 he was elected to what turned out to be an 18-year hitch as president and chairman of the board of directors of Callaway Mills, at LaGrange, Ga. Along with this went terms as president of the American Cotton Manufacturers Association and the Cotton Manufacturers Association of Georgia.

But if Callaway had to shelve his idea, he didn't forget it. Ten years ago—at 42—he decided that he'd been in the cotton business long enough. He wanted to farm, to get to work on that idea of his. And he did—with characteristic thoroughness. He moved out to LaGrange to the 31,000 acres of eroded and worn-out rolling Piedmont land he'd bought in Piedmont section—Harris County—now known throughout Georgia as Blue Springs Farms. And with the exception of flying trips to such meetings as the board of directors of U. S. Steel and Chemical National Bank & Trust Co., Callaway stayed at his farms working out the first part of his idea, i. e., that conservation farming can improve average worn-out land to the point where it will again make a profit.

By Bert D. Robinson and James A. Smith





Callaway was host to more than 600 stockholders and agricultural workers at Blue Springs Farms in June 1946.



Good fishing in 3-acre pond on Georgia Better Farms No. 1, stocked with fingerlings only 5 months and 21 days previously. Holding the catch is the corporation's president, John D. Thompson; his companion is a stockholder, Judge Joe Peavy.

**H**E proved his point. Last year, for example, the gross income from his Blue Springs Farms reached \$325,000. This is income from 1,100 acres of kudzu, 500 acres of sericea lespedeza, 350 acres of alfalfa, several acres of muscadine grapes and blueberries, 6,000 turkeys, 14,000 mallard ducks, 250 head of beef cattle, and a few other items. The perennial crops are harvested, dehydrated, ground, and used as protein supplement in dairy and other harvested feeds.

So far, so good—but how about the second, and most important part of his idea? “We won’t have achieved our objective until we have demonstrated

Cason Callaway, pioneer and crusader for new ideas and new crops for the South, personally directs many of the activities on his Blue Springs Farms.

these practices on farms and with the acreage and the kind of land available to the average farmer,” Callaway repeatedly told friends.

By 1944 he had figured out what he hoped would be the answer. He christened it the “Georgia Better Farms plan,” and set out on a personal sales tour up and down the State, backed by the Agriculture Panel of the Board of Regents, University System of Georgia. The response he got was phenomenal. Georgia people explain this in two ways. They point to the practical simplicity of the plan itself; and they point out that the man selling the plan was Callaway. Callaway in action, they say, is something to see. Stockily built, dynamic, friendly, Callaway gets action from business and professional leaders everywhere. His modesty is as genuine as his facts. These facts, and Callaway, so impressed Georgia’s bankers, doctors, lawyers, farmers, merchants, and other business and industrial leaders, that more than 700 of them formed 100 farm corporations in 67 counties to carry out the Better Farms plan.

Here’s how the plan works: The business and professional people form groups of seven, and each puts up \$1,000. They purchase a farm, and hire an operator who wants to make a go of farming. They provide him with a few chickens, a pig or two, a cow, a garden spot, and as much machinery as can be obtained. They modernize the home and

farm buildings, and follow a specific operating plan outlined by the local soil conservation district with the help of the Soil Conservation Service, the Georgia Extension Service, and the Georgia experiment stations for rebuilding worn-out land. In every case, the land was no better than the average land in the community, and often it was worse. It was important that this type of land be used if the demonstration was to be convincing. These farms average 140 acres in size. They consist of cultivated land, wooded land, eroded land, idle land—a wide assortment. They cost the corporations \$3,100 each on the average, or about \$22 an acre. All of them were in a run-down condition from neglect or from what many Georgians call "the South's curse:" Its one-crop system of farming, often followed for generations.

In the Piedmont the farms were badly eroded both by gullies and severe sheet erosion, with well over half the open land abandoned. In the Coastal Plain the land had been left idle to grow up in weed trees. Less than a half dozen dwellings on these farms were livable. The farm buildings were in poor condition too.

Two years ago a stockholder of one corporation described the farm his group purchased with these words: "Near the center of Georgia Better Farms No. 13 is a symbol of what brought ruin to the rural Southeast. It is an abandoned double-foot plow, its metal parts reddened with rust and its oak handles bleached and cracked by weather. It stands with blades still set in the ground, where a farm hand left it one evening maybe 5 years ago. \* \* \* The Bermuda and Johnson grass, and scrub pine which followed the plow pushed into the fields. The open patches grew smaller and so did yields of cotton, corn and peanuts."

"But today," says this stockholder, "the old field lines have been straightened to round out an even hundred acres of cropland—put back where they were before tenant 'patch farming' did the things to this Dougherty County farm which are the inevitable results of methods which take no thought of the morrow."

This is one among the many corporations which have cleared and bulldozed rough land; removed stumps and rocks; constructed new fences and improved their pastures; added missing soil elements

and planted cover crops; constructed new buildings and renovated old ones.

The stockholders have repeatedly shown how they feel about their investment. Practically all of them have invested additional money in amounts ranging from \$3,000 to \$5,000 to complete the demonstrations.

Which is exactly the attitude Callaway hoped they would take, and exactly the attitude he hopes to make general. It is this attitude, he feels, which will make available to good farmers the "long-term commercial credit they must have to lift Georgia agriculture out of its morass."

Callaway illustrates his point in this manner: "A doctor has \$16,000 to invest. A neighborhood boy with \$4,000 comes to the doctor and says he can buy a certain well-known worn-out farm in the community for this amount, and wants to borrow \$16,000, a few hundred dollars each year, with



Many new homes and other farm buildings have been built on Georgia Better Farms. Here's the house on Farm No. 42 at Hawkinsville. Examining the farm plan are young Zane Goss, operator, and R. C. Masse, stockholder. To their right are Elma McEachern, stockholder, and Mrs. Goss.

NOTE.—Mr. Robinson is cooperative employee of the Soil Conservation Service and the Agricultural Panel of the Board of Regents, University System of Georgia, Atlanta. Mr. Smith is current information writer, Soil Conservation Service, Washington, D. C.





Little more than 2 years ago this was one of thousands of abandoned farms in Georgia. Faith in the Callaway program prompted Edward Bland, recent purchaser, to vow that he would "run rings around the two other Georgia Better Farms in Dougherty County." With a rotation of corn, peanuts, lupine, and grain, good dividends already are being realized.

which to improve it. Regardless of the young man's character," says Callaway, "I don't think the doctor would lend him the money, and neither would I. This is a normal reaction."

"But suppose several years from now the same type young man approaches the same type doctor and says, 'Doc I can buy this farm for \$4,000. Georgia Better Farms No. — over in a neighboring county bought a \$4,000 farm. They had a farm plan made and a budget worked out on reasonable expectancy as to how they would spend \$16,000. Today they have a \$20,000 farm and are making an acceptable return on the investment. I expect to have a land-use plan and a budget worked out similar to theirs. I believe I can do the same thing.' I don't say the doctor would automatically lend him the money; but he would certainly at least consider it; and there's a good chance he might do it."

There is nothing novel in the objectives of the Georgia Better Farms plan. Most of them are included in organized endeavors long under way, and during the past 10 years they have been vigorously advanced in Georgia. Most unique in this plan is the combined effort of seven men with identical interests in a common cause.

"Conservation farming is not new," Callaway

concludes. "But when we get hundreds of farms demonstrating that it pays we are going to get Southern capital to back Southern farming in carrying out a specific agricultural plan."

In the spring of 1946 at a meeting of more than 600 stockholders and agriculture workers Cason Callaway announced an expanding program for the Georgia Better Farms. For the consideration of the stockholders the broader plan suggests several alternatives, any one of which should provide means for further demonstrating the soundness of the program. Ten prospective farm conservation plans were prepared to cover workable combinations of crops and livestock suitable for Georgia conditions, each an explicit outline of farm operations by years up to 5 years, indicating estimated permanent investment, operating investment, operating costs, and net farm income. A modification of these plans will provide suitable information for any farm operation that may be adopted.

Cason Callaway is so much convinced of the value of the Georgia Better Farms demonstrations that he is offering a 14-day trip through the North and Middle West to stockholders of the 25 top-ranking corporations in 1948. The Farm Panel will select the winning corporations for the trip, based on progress made through 1947.

Callaway says he anticipates at least 6 from each of the 25 lucky corporations will be able to make the trip. Other guests will include members of the board of regents, the chief executive of the State, heads of the State agricultural agencies, and the Farm Panel.

(Continued on page 164)

# New England Dust Bowl Under Study

By Wellington Brink



Extreme example of devastation at Easthampton.

NEW ENGLAND, too, has destructive winds and cantankerous soils. Dust storms rise with alarming frequency in the famed Connecticut River Valley, slash at onion and tobacco lands priced up to \$1,000 per acre.

Until recently the patient people of Massachusetts did no fighting back. After each storm, they swept their homes, wielded their dustcloths, cleared their lungs and resumed their efforts to make quality crops in the face of ill-tempered Nature.

But patience and soils gradually grew thin. And science, quartered at the very scene of misbehavior, began to stir itself. As early as 1931 Amherst's noted Dr. W. S. Eisenmenger began to formulate the strategy of attack. And in 1937 he put his finger on the man best qualified to conduct this attack.

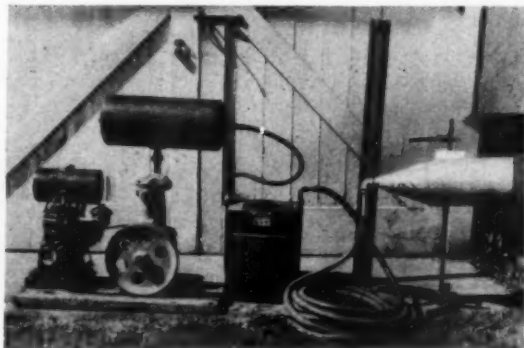
Karol Kucinski, research assistant at Massachusetts State College, grew up on a farm near Amherst. As a boy he saw the dervishes that swirled down the valley. Seldom did they reach the Kucinski farm in the rolling hills toward Pelham, but he knew the damage they were doing, the discomfort they were causing, and the fact that something must be done before it was too late. He watched carefully the fight waged by the Soil Conservation Service to nail down the blow areas of the west.

Kucinski's graduation in 1934 was followed by a fellowship for work toward a master's degree which was awarded in 1937. More recently Kucinski has continued his research in connection with a Ph. D. His thesis, "Some Properties of

Wind-Blown Soils in Massachusetts," published last June, constitutes something of a milestone.

Kucinski began at the beginning, knowing full well that he had no western "bowl" on his hands. The soils were different, the crops were not the same. He was dealing with a contrasting climate and a different community of people and farming traditions.

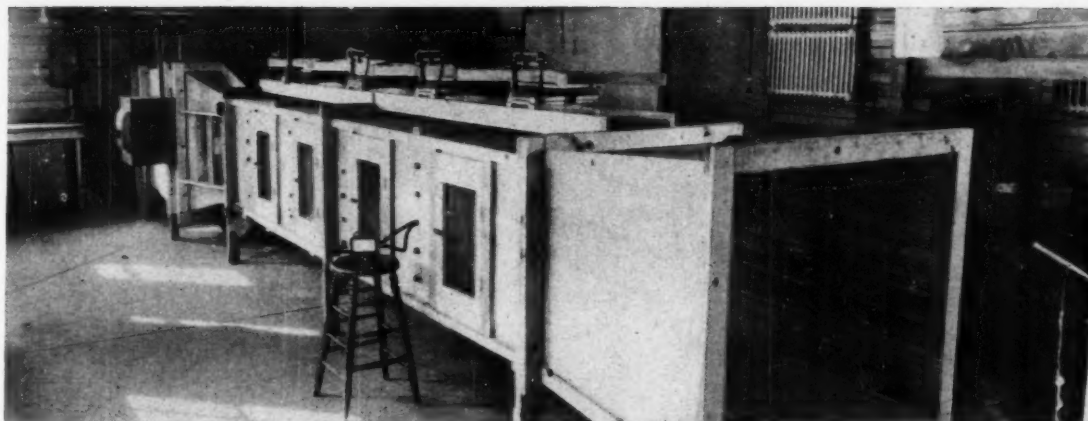
Kucinski probed the valley's secrets indoors and out. He went to the fields with a portable dust-collector, to make an exact count of the airway's traffic. His gadget was complete with gasoline engine, air pump, tank, gas meter, suction hose and dust-filter unit, and it enabled him to find out exactly what particles were moving at varying heights from the ground. He could measure, then, their dimensions and their physical and chemical



Portable dust collector used to collect samples in field during storm.

properties, and estimate the wind-wasting of fertility from the land.

Within his laboratory Kucinski constructed a 40-foot wind tunnel—a great neck 3 feet high by 5 feet wide, having at one end a 15-horsepower motor with airplane propeller. Large, flat pans, hung by wires from scales, were provided for soils under test. And across the surface of these soils, Kucinski, with the throwing of a switch, could send a wind of as high a velocity as 50 miles per hour at 1 foot above the "ground." The tunnel's function is to control and standardize comparisons.



Wind tunnel which measures losses of different types of soils under varied velocities.

Which soils blow most? Which least? Which conditions are most favorable to pushing the dust up into the air? Kucinski, over the months, has been gathering the needed data for reliable answers. He is still gathering the evidence, on which farmers of the Connecticut River Valley may base soil conservation practices in the future. He is working with the agronomy department, Massachusetts Agricultural Experiment Station, in cooperation with the Soil Conservation Service.

**S**TRANGE behavior has been noted. These are Massachusetts soils, remember, not Texan—such soils as Windsor sand, Agawam fine sandy loam, Suffield silt loam, Merrimac fine sandy loam, Gloucester fine sandy loam, Cape Cod dune sand, and innumerable other groups unfamiliar to the western or southwestern farmer. They have their own peculiar flying habits. For one thing, those soils of finer material appear less likely to blow. Beach sand takes off more readily than silt loam. Ease of aggregation, of coagulation, has something to do with it. Chemical content is another factor. *Wet* soil “stays put” but *frozen* soils are nervous and flighty. Frost action lifts particles up where breezes can get at them, and sends them skittering. When there’s no snow in the winter, dust whips up readily. Abetted by his tunnel, Kucinski has duplicated just about all the conditions imposed by Nature and has come upon many a surprising phenomenon hitherto unsuspected by the valley’s producers of choice onions, potatoes, and tobacco.

What to do?



Karol Kucinski.

It is still too early to come out with anything like a complete program for the control of wind erosion in the area. As yet, the technicians will be well pleased if valley farmers will give adequate attention to windbreaks and winter cover.

Kucinski is suggesting employment under certain conditions of 4-foot fences of lath, braced by well-sunk posts, as barriers against prevailing winds, at the head of local “blow spots.” Another idea he advances is the use of 4-foot-wide ribbons of grain as a similar temporary device.

(Continued on page 182)



By R. Y. Bailey

**A** TOTAL of 37,300,000 pounds of blue lupine seed was harvested in Georgia, Alabama, and Florida in 1946, according to the Bureau of Agricultural Economics. Lupine took its place among the leading winter legume cover crops.

The Soil Conservation Service had an important part in achieving this remarkable record. Its interest is sharpened because blue lupine is filling such a vital place in soil and water conservation programs on the sandy soils of these three States, especially where peanuts are grown.

The luxuriant growth of lupine at the North Florida Experiment Station at Quincy, Fla., early in the spring of 1937 impressed Service representatives who visited the station. They thought that the plant might be the answer to a long-felt need in the deep South for a winter legume that would make early spring growth in time to be turned under for early planted crops, and that would produce seed.

The Service arranged with J. D. Warner, agronomist at the station, with W. E. Stokes, agronomist at the Florida Agricultural Experi-

A farm home, that of T. H. Bass, in a blue-green sea of blue lupine. This is in the Lower Chattahoochee River Soil Conservation District of Georgia.

ment Station, Gainesville, Fla., to get a few hundred pounds of seed in the fall of 1938. This seed was planted in the demonstration project at Greenville, Ala. Results were sufficiently promising to warrant further plantings elsewhere.

In the fall of 1939, we purchased 1,500 pounds of seed with CCC funds and distributed 500 pounds to each of three CCC camps assigned to the Soil Conservation Service and working in the Coastal Plain of Georgia, Alabama, and Mississippi. In spite of the severe winter of 1939-40, the lupine made fair growth at Perry, Ga., and Dothan, Ala. Severe freezes damaged the plants at the Collins, Miss., camp to such an extent that local personnel decided lupine was out of its range over there.

Additional plantings were made in Georgia and Alabama in the fall of 1940 with seed harvested the previous spring. Several farmers had become sufficiently interested in lupine from observations they had made of the plantings that survived the severe freezes of January 1940, to purchase additional seed from Florida that fall and again in the fall of 1941.

NOTE.—The author is Chief, Regional Agronomy Division, Southeastern Region, Soil Conservation Service, Spartanburg, S. C.



After this country entered the war, there was an immediate demand for greatly increased production of peanuts for food and other purposes, and a heavy burden was placed on the erodible sandy soils of the peanut belt. Soils left bare by the harvesting of peanuts proved highly susceptible to erosion, particularly sloping land.

Farmers and others in some of the principal areas of peanut production became alarmed over the severe land damage that might result from several years of intensive cropping of large acreages. They had grown peanuts in the past, but the acreage had been hogged off so that the vines were left as a protective cover on the land. The largely increased need for peanuts would likely expose too large a proportion of the land to both erosion and depletion of organic matter.

Thus it came about that Soil Conservation Service was called on to take immediate steps to get some kind of cover on the land after the harvesting of peanuts. A committee of interested people went to Washington and talked with the Chief of the Service. They had a serious problem on their hands and they required help immediately.

In the spring of 1942, a conference was called at Spartanburg, S. C., to find ways for meeting this need. Representatives of the Washington, regional, and area offices spent 2 days in formulating a plan of action.

Following this meeting in the regional office, tentative outlines were developed for several kinds of field plantings of different winter crops that might provide ground cover following harvesting. Agronomists from Georgia, South Carolina, and Alabama met with representatives of the Washington, regional, and area offices in June 1942 to lay out a program.

In the fall of 1942 the Soil Conservation Service purchased sufficient blue lupine seed, Austrian Winter peas, and oats for observational plantings in the principal peanut-producing areas of Georgia, Florida, and Alabama. Several different seeding methods were tried. These included seeding ahead of harvesting peanuts so as to allow cover-crop seed to be covered by the digging operations. Different methods of seeding immediately following the harvesting of peanuts were also used. And various dates of seeding were tested.



J. D. Warner, agronomist at North Florida Experiment Station, in field of blue lupine.

As has been pointed out, it is common practice in the runner-peanut areas to glean peanut fields with hogs after peanuts are picked from the stacks in the fall. We could not ask farmers to keep hogs out of the fields, because they depended on the gleanings for a considerable part of their hog feed. Also, the pork that could be made in this way was as necessary in carrying on the war as were the peanuts.

We decided that unless sufficient roots could be developed while peanuts were in the stacks, to survive the gleaning by the hogs, we could not hope to succeed with cover crops. Consequently, we asked farmers to subject fields where cover crops were seeded to normal gleaning by hogs, so that we could see whether any cover crops would survive.

Blue lupine came through the gleaning period surprisingly well. Although many of the plants were destroyed, a great many others survived and provided considerable protection during the winter and either a seed crop or a green manure crop in the spring. Early plantings survived much better than late plantings. Lupine usually made the best showing among cover crops.

Farmers in the Wiregrass Soil Conservation District of Alabama were more successful with their cover crop plantings in 1942-43 than those in the Georgia and Florida districts. We studied field results in all three States and tried to learn why certain plantings had failed and others had succeeded. Numerous photographs and notes helped to explain the reasons for success or failure.

Lantern slides made in Alabama where plantings were successful whetted the determination of farmers in Georgia to try again in the fall of 1943. Additional seed was purchased by the Service for use in Georgia, Alabama, and Florida in the fall of 1943. Cooperative field trials were planned with State experiment stations and extension services in 1943. It was interesting that farmers in those communities in Alabama where the 1942 plantings were successful were not interested in seeing trial plantings made in their communities in the fall of 1943. They were convinced and fully ready to go ahead with planting their entire acreage of land from which they were harvesting peanuts that fall. Several farmers who began with small patches in the fall of 1942 planted all of their 100 to 200 acres of peanut land to blue lupine in the fall of 1943.



More than 23 tons of green vegetation per acre. James K. Alvis and D. C. Morris, Soil Conservation Service technicians, weigh blue lupine cut from small plot on Haley Farms. The Haley brothers planted more than 1,800 acres of blue lupine in 1944.

Supervisors of soil conservation districts in southern Georgia met at Tifton in the spring of 1943 to discuss cover crop problems on their peanut lands. They were shown lantern slides that were made in the three principal peanut-growing States in the spring of 1943. Reason for success and failure of the different plantings were discussed. These supervisors conducted a campaign during the summer of 1943 to get cover on peanut land that fall. They enlisted the assistance of all agricultural agencies, bankers, merchants, and others in getting farmers interested in planting lupine.

Supervisors in southern Georgia, as well as those in the other States, have continued to promote the idea of getting cover on peanut land. Largely as a result of the foregoing activities of the districts and the different agricultural agencies, blue lupine has come along very rapidly during the past 5 years. It is of interest that Georgia was the leading seed-producing State in 1946 with approximately 27,000,000 pounds.

As a result of the unfavorable start with lupine in Mississippi, there was a lag in interest in the

crop there. The relatively small acreage of peanuts grown in Mississippi probably was one reason why lupine was slow to get started. This is mentioned to show something of the relationship between peanuts and lupine. The heavy demand for harvested peanuts in the other States created such a serious problem that we had to do something about it. A few failures with lupine did not discourage farmers and field personnel in these areas of heavy peanut production to the same extent as in Mississippi where they had a less extensive peanut acreage.

Largely as a result of the influence of regional technicians of the Service, and the harvesting of lupine seed at one of our regional nurseries, additional plantings were made in southern Mississippi in the fall of 1945. These plantings were successful, and, as a result, we have received a report that the work group of Lucedale planted 235,000 pounds of lupine seed in the fall of 1946.

We have shipped lupine seed from the Southeast to interested farmers across the river. In the spring of 1944, Grover Brown spent 10 days in the peanut belt of Georgia, Alabama, and Florida. As a result of what he observed in these States, he discussed blue lupine in portions of Texas where he thought it might grow. About that time, too, an article appeared in *Country Gentleman* which described the work being done with lupine in the Southeast. As a result of the two events, farmers in Texas ordered seed from an Alabama farmer. Press releases indicate that farmers, county agents, and others are waxing enthusiastic about lupine's future out there.

One of the problems that we face now is to get lupine fitted into a soil and water conservation program. We must guard against allowing it to become the entire vegetative program in areas where it is important. The crop grows so well and stirs so much local interest that it may be allowed to overshadow other necessary phases of a vegetative program. It fits almost perfectly as a cover, following harvested peanuts, and should have a place in areas where it is adapted, wherever annual winter legumes are planted in the fall and turned under in the spring. Its ability to make seed that can be harvested each spring is particularly important in areas where farmers spend money each fall for cover crop seed.

The rapid increase in seed production indicates that blue lupine may reach the hundred million mark within the next 5 years. The sandy lands

of the Coastal Plains need several hundred million pounds of lupine seed annually. We don't know how much seed finally will be harvested and planted in the Southeast, but a fair start toward the goal has been made.

The Soil Conservation Service derives considerable satisfaction from having pioneered the introduction of this valuable legume, following the work of the Florida Agricultural Experiment Station in making seed available and in showing us the possibilities of the crop. Our regional type of organization was a distinct help in blue lupine's wide distribution, for when the legume failed in one State we used the results in another State to encourage further trials.

## *Press Supports Districts*

At the recent annual meeting of the Southern Newspaper Publishers Association, the following resolution was adopted:

*Resolved*, by the Southern Newspaper Publishers Association at this annual meeting, that we wholeheartedly endorse the soil conservation district movement, and urge members to (1) encourage farmers to form districts where districts have not been created, (2) include soil conservation, as now carried on by these districts, in their community betterment programs, (3) give full support to the work of soil conservation district, (4) encourage business, industry and other urban groups to give even greater assistance to the conservation of our land resources, and (5) advocate the teaching of soil conservation in public schools.



# *Classrooms Expand in Alabama*

By James W. Burdette

**O**N THE rolling red hills of Clay County 40 Alabama teachers and school officials last summer found a new textbook—the land itself. By

NOTE.—The author is head, section of education, Soil Conservation Service, Spartanburg, S. C.

now the group of 40 has grown to 820, all of them teaching right out on the land the way to a better living through the wiser use of soil and water.

It now looks as if every Alabama school one day will be carrying soil conservation to its students



C. L. Turnipseed explains wildlife border planted to bicolor, sericea, and partridge pease. The teachers, attending the Lamar County Farm Resources Workshop, are Mrs. D. Z. Vick, Fayette, Ala.; Evelyn Davis, Kennedy, Ala.; Helen DuBose, Crossville, Ala.; Mrs. Marion Turner, Sulligent, Ala.; and Sarah Waldrop, Millport, Ala.





Thirty-five Alabama teachers hear Bob Hoit, district conservationist, explain a farm plan.

without adding a single new course to the already crowded curriculum. Instead better land use and soil conservation methods will be established as an integral part of the other courses.

The transformation began with resource-use workshops for teachers at the University of Alabama, Alabama College, Alabama Polytechnic Institute, Florence State Teachers College, and Jacksonville State Teachers College. It gained momentum when 40 educators chosen from the workshops, and meeting at Clairmont Springs for a week's study of soil and water conservation, were taken to see first hand the conservation practices used in the Piedmont Soil Conservation District.

The Clairmont Springs meeting represented weeks of careful planning by O. C. Medlock, State conservationist of the Soil Conservation Service, and Dr. Ed. J. Carter, formerly of the Alabama State Department of Education.

It was a new idea in the training program for Alabama teachers.

How would the teachers react to strenuous trips through the fields, pastures, and woodland? Could they see anything that would be useful in the school next year? Could the technicians develop in simple terms the workshop theme, "Better Living Through the Wise Use of Land"?

Field trips were made each morning. Travel

was held to a minimum, no more than two farms being visited on any one trip. Soil Conservation Service technicians carefully explained one phase of land use and then conducted the group over the farm; pointing out how it could be applied to this particular farm, field by field. Often the farmer himself accompanied the teachers and assisted in answering questions.

On Monday there was an inventory of soil resources, conservation survey, and land-use capabilities. The group studied farm planning on Tuesday. Then followed, day by day, engineering, agronomy, woodland and wildlife practices. Each afternoon the teachers discussed what they had observed during the morning study trip, and how the information could be used in the schoolroom. Motion pictures, talks by leaders in agriculture and industry, singing, and group sports each evening rounded out the day's program.

Indications that the workshop was a success were evident before the end of the week. Teachers and school officials were asking for a bigger workshop next year.

Several months have passed since the Clairmont Springs venture. But the experience and knowledge gained at that time are being used as the nucleus for an ever growing program.

Let's take a look at what's been going on in the

Tombigbee-Warrior Soil Conservation District. K. N. Tucker, district conservationist, and four teachers who had attended the Clairmont Springs workshop, recommended to County Superintendent G. S. Smith a county-wide workshop for Lamar County teachers. This brought together 120 Lamar County teachers, late in August, for a 3-day outdoor study course. Field trips, motion pictures, and discussions by leading educators were its high lights. Not to be outdone by Lamar County, Fayette County arranged for a 5-day workshop for more than 100 teachers the following month.

With more than 250 teachers in Tuscaloosa County, District Conservationist Tucker and school officials developed a slightly different approach. They called the 35 school principals together for a half-day discussion. The film "This Is Our Land" was shown, and there were talks by representatives of the university. Next day C. L. Turnipseed, Jr., work unit conservationist, led a conservation field study trip—a trip which included a study of soils and land capabilities and the needed practices on an unplanned farm and the established practices on a farm with a complete conservation plan.

On the following 2½ days all teachers in Tuscaloosa County heard from the principals what they had seen, through panel discussions, motion pictures, and group meetings. Now, all 241 teachers are interested and all are planning to make field-study trips soon. Their theme is "The Place of Schools in Building a Healthy and Prosperous People in Tuscaloosa County."

In an adjoining district, Conservationist A. L. Harrell and Cullman County school officials participated in a 5-day workshop for 310 teachers. These teachers represented 43 schools. Tom O. Watson, district supervisor, attended the workshop for 2 days and took an active part as a consultant in group discussions. State Conservationist Medlock spent 2½ days with the group and gave an illustrated talk before the teachers went to the field.

Standard conservation practices were scrutinized on the W. J. Daniel farm. Pasture development, crop rotation, meadow outlets, wildlife border strips, and other measures, were explained by technicians. For comparison, the teachers visited an adjoining farm not under district agreement. The contrast between the farms was most striking.

Several teachers who own farms have already

made application to the district supervisors for farm plans. Superintendent R. E. Moore of Cullman County reported to Harrell that "in the opinion of the teachers, as well as the Board of Education, the workshop was among the best ever held in Cullman County."

It can be said accurately that these soil conservation districts, which welcome help in conservation from every agency and individual, now have more than 820 new conservationists. And as these 820 teachers unloose in their classrooms their new understanding of the soil and its needs they will be making converts of their pupils—8,000 or more potential soil conservationists, the new generation on which the future of the local agriculture so largely depends.

## LAND VALUES

(Continued from page 149)

paid are reduced to a very low state of productivity. The remedy is to guard against contracting long-term investments on the basis of temporary high incomes.

Conservation farm planners, district conservationists, and district supervisors can do much to prevent the disasters which are sure to follow excessive farm debt. They can teach farmers and other farm-land investors the fundamental facts concerning land values. Warnings against capitalizing current high incomes into long-term contractual debt may produce more soil conservation than some of the more direct measures commonly followed.

## NEW ENGLAND DUST BOWL

(Continued from page 155)

"It may be said without reservation that there are no cultivated fields that cannot derive some benefit from plowing under of a cover crop," Kucinski holds.

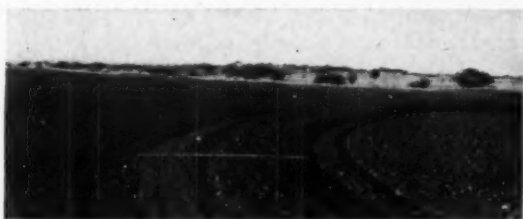
He favors rye on tobacco and early potato fields, which are usually harvested before Labor Day. But, on the other hand, "barley or oats, which will winter-kill, yet produce a desirable protective mat cover, may be used in tobacco fields which are not expected to be plowed in the early spring." He has much more to comment on the usefulness of various cover plants but it all adds up to an urgency to get masses of roots and leaves and stalks out there on, and in, the surface inches to keep the soil quiet while the wind whistles overhead.

# Farming in the Land of Cecil Rhodes

BY CHARLES R. ENLOW



Final stage of building ridge terrace with ditcher and disc plow.



Broad-base terrace after remaking with disc plow.

**S**OUTHERN RHODESIA has many modern farms. Some of them electrified, and many having milk separators, feed grinders, corn shellers, refrigerators, and radios. Pure bred horses, cattle, and sheep seem to be more common than in the United States. Farm homes generally are delightful. It's a long way between them, but what a pleasant surprise when one arrives!

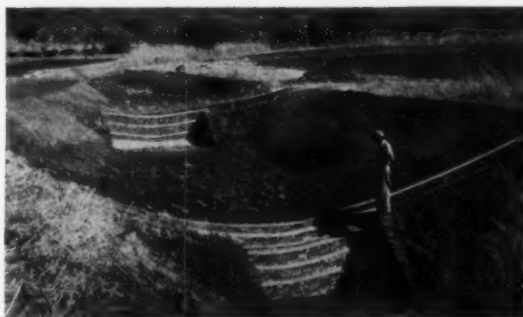
The author recently spent 3 weeks visiting farms, ranches, and agricultural experiment stations in Southern Rhodesia, traveling 1,500 miles in Government-owned, American-made cars on very good roads. Visits were made also to tobacco warehouses, factories, and auction sales to dehydrating plants and cold storage plants; and to ruins so old that all records are gone. And gold mines, run by farmers! A good many farmers raise corn, tobacco, potatoes, wheat, peanuts, hay crops, and livestock, and operate gold mines on the side.

There are only 70,000 whites ("Europeans"). Less than 4,000 are farmers. The farms average 3,000 acres in size, not counting a few large ranches that run from  $\frac{1}{4}$  to  $2\frac{1}{2}$  million acres. The natives outnumber the whites 20 to 1.

NOTE.—The author is agricultural attaché, U. S. Embassy, Union of South Africa.



Native cattle grazing on sweet veld in granitic soil area.



Gully control structures on E. S. White farm near Concession.

Southern Rhodesia is mostly classed as "forest." Actually because of repeated burning, much of this is of scrubby growth. In general, the country is a plateau, sloping to low altitudes on the Zambezi river, along the northern boundary, and the Limpopo river, along the southern boundary. The two principal centers of population, Bulawayo in the west and Salisbury in the northeast, are nearly 5,000 feet above the sea. They are clean and attractive cities.

The Newmarch and McClean farm, near Salisbury, contains 5,000 acres, 2,500 of which are under cultivation. About half of the cultivated land is in corn, a white eight-row dent of a flinty appearance. Two hundred fifty acres are planted to potatoes (Scottish seed) and considerable acreages are used for sunn hemp (*Crotalaria juncea*), cow-peas and sunflowers. Practically all fields are broad-base terraced. Cultivation generally is across the terraces. Approximately 60 percent of

the cultivated land is terraced, as this is one of the practices required to get the conservation bonus payment of 2 shillings (40 cents) per 200-pound bag of corn produced. Four hundred head of cattle, mostly of the Sussex breed, are fed on veld hay, sunn hemp hay, cowpea hay, and sunflower heads, mixed and ground. Veld hay is also cut in quantity for bedding, and enormous quantities of compost manure are used, principally on potatoes. Three hundred bacon-type hogs are raised on carefully balanced corn, potatoes, meat, blood, and bonemeal.

Newmarch and McClean also operate a gold mine on ancient diggings. It is about 500 feet deep. The gold is extracted by the cyanide process. Shafts used by the ancients have been uncovered. They are only 2½ feet in diameter.

The farm is equipped with machine shops, electrically operated feed grinders and hammer mills. Repair work can be done right at home. Flour and "mealie" meal (corn meal)—one of the principal foods of the natives, are made on the farms.

W. Adams, a dairy farmer near Salisbury, operating a farm of 1,500 acres, carries 400 head of Holstein cows and young stock. His farm buildings are good, and the residence is most attractive. Here again everything is operated by electricity, except that natives do the milking. The pastures have all been grubbed, and are mowed to control brush and weeds. Corn is grown both for silage and grain.

W. Sole, at Glendale, is one of the leading farmers in Southern Rhodesia. His 440-acre corn crop (not hybrid) this year will average 20 bags (71.4 bushels) per acre. He had produced 56 bushels per acre over a 17-year period. These are dairy cattle, hogs, horses, and poultry. Alfalfa, sunn hemp, velvet beans, perennial sudan grass are among other crops grown. This farm also is electrified.

Southern Rhodesia is primarily a livestock country. Europeans own approximately a million head of cattle, and the natives about two million. The native cattle are of mixed breed, well adapted to the climate. Africander cattle, an excellent breed, seem to predominate in the herds of European farmers. Mostly work oxen are of this breed also. There are some very fine Black Angus, Shorthorn, Sussex, and Hereford cattle. Many of the farmers and ranchers are following well planned cross-breeding programs in order to combine the best qualities of foreign breeds with the

heat resistance and other good qualities of the Africander and other native cattle.

There are 300,000 sheep in Southern Rhodesia, three quarters of a million goats, 150,000 hogs, and a few thousand horses and mules. There are many kinds of wild antelope, which furnish much food and good hunting.

The Agriculture Experiment Station at Salisbury has developed some corn hybrids that are said to be yielding a hundred bushels per acre. The livestock breeding work centered at Matapos is extensive. The program is very practical, most suited to Rhodesian conditions. A comprehensive pasture program, carefully planned to answer the problems of the country, is getting well under way. Other research has to do with fruit, tobacco, green manure crops, seed production, etc.

Definite areas, "native reserves," are set aside all over the country for the natives, who generally are not the best of farmers. The Department of Native Affairs has carried on some soil conservation work in these areas, and yields in some instances have been increased fourfold.

Everyone who goes to Rhodesia should see Zimbabwe Ruins, near Fort Victoria. They seem to fit in with a series of other ruins leading to the coast, with gold mining—apparently their objective. What is more interesting to agriculturists are the ancient terraces. Along the mountain slopes from Nyanga to Umtali, there are hundreds of square miles with bench terraces and old irrigation ditches, many preserved by a heavy growth of grass. Some of the structures have stone retaining walls, others are of earth construction. The engineering is of high order, with gradients similar to those used today.

## GEORGIA BETTER FARMS

(Continued from page 153)

The trip will include one day on the United States Department of Agriculture experiment station, Beltsville, Md., the Hershey farms in Pennsylvania, Seabrook farms in New Jersey, the experiment station at the University of Wisconsin, a day in Chicago at the Gary steel works, and at least 1 day in the corn and hog section of Iowa.

The attention of a great many people in Georgia and other States in the Southeast are focused on the 100 demonstration farms. Practical farmers who know about the Georgia Better Farms set-up say the program already has brought about a closer relationship between business and agriculture.



## Card of Appreciation

The Rev. S. Norman McCain, Jr., of Copenhagen, N. Y., has a new way to herald soil conservation. He writes postcards to conservation farms he sees on his trips through New York State and New England. His postcards are different. He addresses them like the one he sent to W. I. Goodrich, of West Danville, Vt., a cooperator of the Winooski Soil Conservation District.

Mr. Goodrich received a card addressed to "The Man of Cabot on Route 2 Who Contours His Crops, Cabot, Vt."

Mr. McCain, an ardent conservationist and graduate forester, feels that his novel addressing of cards will attract attention at the post offices which handle them. His card to Mr. Goodrich reads:

"DEAR SIR: Of course it is a pleasure to drive through as beautiful a State as Vermont, but it was a special pleasure to me when I saw your crops on countour. The beauty of Vermont comes from its hills and mountains, and because of this it is essential that the land be farmed properly. It is a sad sight indeed to see topsoil being washed away. It makes for a poor country. I hope ever so much that your neighbors will see the wisdom of your actions and follow your leadership. May your harvest be plentiful."

The forestry-trained minister says that he can't hope to tell farmers in his congregation how they should farm, but he can tell them that "the land is a heritage for them to use as God would have them use it." He maintains that when a farmer allows his fields to wash down into the road, he is wasting something that is not his to waste.

Mr. McCain practices his lessons on his contoured gardent plot—50 by 100 feet.

## "The Land Has Been Kind"

BISHOPVILLE, S. C.

SUPERVISORS' LYNCHES RIVER SOIL CONSERVATION DISTRICT,  
Bishopville, S. C.

DEAR SIRS: Back in 1938 I came back to my old farm of 95 acres that I had bought in 1900. From 1938 to 1943 I tried to make a living for my family of five on this badly eroded and depleted land that had been mistreated during my absence.

For a colored family with little income, we started out with a mortgage, 2 mules, 1 milk cow, 25-50 chickens and enough hogs for home use, and then some years we had no meat. Each year I had to buy corn, as my yield averaged only about 15 bushels and also had to buy 3 to 4 tons of hay each year. My oat yield was low—about 15

bushels—and averaged 7 bales of cotton on 16 acres. This was the picture in July 1943 when I requested the services of the Lynch River Soil Conservation District mainly to help me in a terracing program.

The man from the Bishopville office advised me of a program for the whole farm, as he said, "to make it self-supporting." He also maintained that the soil was low in fertility, rolling and badly washing, which as he said put it in classes IV and V. Of course, this was all Greek to me, but from what he described as to the meaning of this, I knew he was pretty near right from the first 15 years' experience of farming this land.

If I do say so myself, I have followed the plan as closely as I could in the past 2 years. Early in 1944 I got all of my land terraced—about 30 acres—and seeded two 1-acre sericea meadow strips and one permanent strip and set up strip cropping on about half the land.

Then again in 1945 I seeded 3 more acres of sericea; also, I set out an acre and a half to pine trees in thin woods and part of a field that was light. Further, I have cultivated these trees by planting a row of cotton between each row and also added stable manure.

While my yields last year were a little above the average of the last 15 years, they have increased this year beyond my expectations. I have been told that my oat crop was the best in Lee County. Thirty-four bushels and 1 peck was saved for seed from a half acre. My sericea has been cut twice this year for hay and I wouldn't be without it for a crop. My corn crop will average, I believe, 30 bushels to the acre and it looks as if I will get 15 bales of cotton from 19 acres.

With the increased crop yields, I have also increased my livestock to 4 mules, 3 cows, 8 head of hogs, 8 pigs, several hundred head of chickens, and 14 head of turkeys.

The Lord has been kind to me, for I am in better shape of living now than ever in my life for with this year's crops the mortgage will be paid off.

Yours truly,

(Signed) EVA CORBETT.



## A NOTE IN PASSING

The airplane is here to stay. The matter-of-fact tone of the September report which Soil Conservation Service Technician Larry Short of Canadian, Tex., turns in to his headquarters leaves no doubt of that.

Short reported: "The regular meeting of the Hemphill County Soil Conservation District was postponed a day and Supervisor John A. Neece of Mobettle, who is without a telephone, was notified of the change by our flying supervisor, Ed. P. Little of Canadian, who dropped a note from his plane."

## DISTRICT PROFILE

### F. J. SIEVERS

**L**AST of the 48 States to enact a standard districts law, Massachusetts is rapidly getting soil conservation on the land. As a traditional citadel of democracy, the Bay State is patient and painstaking in her weighing of great issues. Her people have grown up liking the town hall style of doing public business, the free-for-all forum which invites both pros and cons and makes room for every shade of opinion. After watching soil conservation districts at work in 47 other States, Massachusetts grew to like them: here, too, was home rule; here, too, was freedom of speech; here, in the provisions for petition and referendum and control by farmers themselves, was the old familiar town hall idea. Massachusetts, therefore, took joyously to herself the machinery and opportunities of soil conservation districts and cast the vote that made the program 100 percent and Nationwide.

In forefront of the State's agricultural leadership—a man who labored fruitfully for the enactment of the soil conservation districts law and ever since has consistently thrown his great force into the development of the district's program—is Amherst's distinguished F. J. Sievers. He is a man of multiple responsibilities. Sievers not only is active as a member of the State Soil Conservation Committee but is also director of the agricultural experiment station and director of the graduate school of Massachusetts State College. Incidentally, his was the first of the State experiment stations to adopt soil conservation for its own farm acres.

Physically, Sievers looks as if he might have been a varsity tackle in student days. His frame is straight and rugged, his lean weight convincing. His gray-haired dignity is tempered by quietly simmering humor. He has a story-telling flair. And it is said that one reason why he is a convincing speaker is that he can argue without becoming angry. He enjoys both bridge and golf, and one of his cronies admiringly states, "Sievers has a peculiar delivery on the golf course; he winds up, then bang!"—inferring that he can hit the ball a long way.



Director Sievers.

That evidently is characteristic. He wound up deliberately, then—bang!—the soil conservation districts took off in the grand manner.

Sievers is a son of Wisconsin—took his bachelor's and master's degrees at the university there. Eventually, he became professor of soils in the State College of Washington, where he became acquainted with the Pacific Northwest branch of the dust-bowl clan. When he came to Massachusetts State College in 1928, he noted at once the kinship of the storms of the Palouse country with those which rage periodically in the Connecticut River Valley at Amherst's door.

Sievers discounts his own contribution to the enactment of Massachusetts' district law, giving credit to farmers and to others on the college staff. "We served entirely in an advisory capacity," he says. "We didn't appear as promoters or agitators—the legislature came to us, not so much to be convinced as to be intelligently counseled."

Sievers is pleased that soil conservation work in his State "has taken a direction that I like to think is consistent with correct educational procedure. No move has come but from those who were to participate and be served.

"We have appealed to the pride of our Massachusetts farmer, have made him conscious of the fact that if he has a gully on his farm it is a reflection on him. Once he feels that way, the rest is easy—he accepts soil conservation as a matter of course."—W. B.

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COMPILED BY WILLIAM L. ROBEY

SCS personnel should submit requests on Form SCS-37 in accordance with the instructions on the reverse side of the form. Others should address the office of issue.

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*Soil conservation works for the farmer in winter, too. Furrows plowed on the contour catch snow, retain moisture, allow the water to seep into the ground slowly. This is one effective way to help prevent floods and at the same time assist vigorous plant growth.*

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